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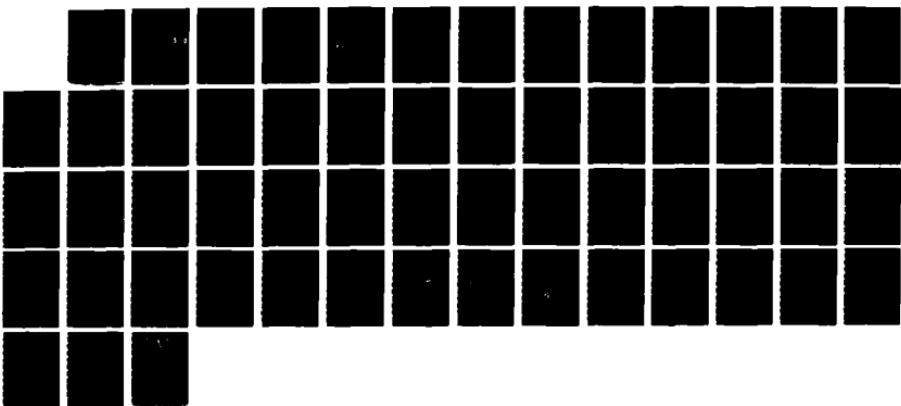
STRENGTH AGAINST WEAKNESS: THE CAMPAIGN IN WESTERN
EUROPE MAY-JUNE 1940 (U) ARMY COMMAND AND GENERAL STAFF
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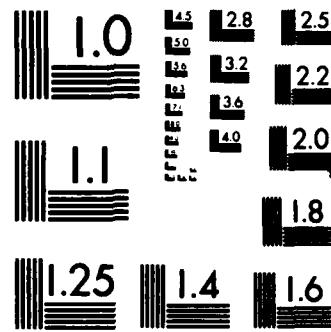
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Strength Against Weakness:
The Campaign In Western Europe, May-June 1940

by
Major John T. Nelson II
Infantry

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School of Advanced Military Studies
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas

8 May 1987

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87-3052

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SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

Form Approved
OMB No 0704-0188
Exp. Date Jun 30, 1986

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RESTRICTIVE MARKINGS	
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution unlimited	
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE		4. PERFORMING ORGANIZATION REPORT NUMBER(S)	
5. MONITORING ORGANIZATION REPORT NUMBER(S)		6a. NAME OF PERFORMING ORGANIZATION School of Advanced Military Studies, USAC&GSC	
7a. NAME OF MONITORING ORGANIZATION		6b. OFFICE SYMBOL (if applicable) ATZL-SWV	
7b. ADDRESS (City, State, and ZIP Code)		8c. ADDRESS (City, State, and ZIP Code)	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (if applicable)	
9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER		10. SOURCE OF FUNDING NUMBERS	
11. TITLE (Include Security Classification) Strength Against Weakness: The Campaign in Western Europe, May-June 1940 (U)		PROGRAM ELEMENT NO.	PROJECT NO.
12. PERSONAL AUTHOR(S) MAJ John T. Nelsen II, USA		TASK NO.	WORK UNIT ACCESSION NO.
13a. TYPE OF REPORT Monograph		13b. TIME COVERED FROM _____ TO _____	
14. DATE OF REPORT (Year, Month, Day) 87/5/8		15. PAGE COUNT 51	
16. SUPPLEMENTARY NOTATION			
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) operational art doctrine military theory center of gravity campaign study (continued on reverse side)	
19. ABSTRACT (Continue on reverse if necessary and identify by block number) This monograph is a campaign study in the practice of operational art, as viewed through the prism of military theory. The following aspects of military theory are among those considered: center of gravity, decisive and objective points, deception, doctrine, friction, fog of war, direct and indirect approaches, theater of war, theater of operations, zone of operations, theater of battle, combinations, and offensive and defensive culminating points. In addition, the following related aspects of campaign planning are analyzed: the use of operational reserves, branches and sequels to campaign plans, planning assumptions, synchronization in time and space, synergism of combat power, command and control, and mass and concentration. The Campaign in Western Europe was really two separate campaigns conducted sequentially. The first, popularly known as "the Battle of Flanders and Northern France" (10 May-5 June), is the central focus of this study. This study finds that the Allies--and especially the French--demonstrated (continued on reverse side)			
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS		21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED	
22a. NAME OF RESPONSIBLE INDIVIDUAL MAJ John T. Nelsen II		22b. TELEPHONE (Include Area Code) (913)684-2138	
22c. OFFICE SYMBOL ATZL-SWV			

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France 1940

Campaign in Western Europe (1940)

deception

German Army British Army French Army

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a virtual bankruptcy of creativity, imagination, and understanding in applying military theory to operational art. The Germans integrated new weapons such as the tank and airplane into a concept of warfighting designed to defeat an opponent who fought in the slow, methodical style of World War I. From the perspective of military theory and operational art, German campaign planning and execution were superb. In the final analysis, German success was largely a triumph of the intellect.

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Accepted this 3rd day of June 1987.

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ABSTRACT

STRENGTH AGAINST WEAKNESS: THE CAMPAIGN IN WESTERN EUROPE, MAY-JUNE 1940 by MAJ John T. Nelsen II, USA, 51 pages.

→ This monograph is a campaign study in the practice of operational art, as viewed through the prism of military theory. The following aspects of military theory are among those considered: center of gravity, decisive and objective points, deception, doctrine, friction, fog of war, direct and indirect approaches, theater of war, theater of operations, zone of operations, theater of battle, combinations, and offensive and defensive culminating points. In addition, the following related aspects of campaign planning and execution are analyzed: the use of operational reserves, branches and sequels to campaign plans, planning assumptions, synchronization in space and time, synergism of combat power, approach to command and control, and mass and concentration.

The Campaign in Western Europe was really two separate campaigns conducted sequentially. The first, popularly known as the "Battle of Flanders and Northern France" (10 May-5 June), is the central focus of this study. In this campaign the Germans broke the back of the Allied armies so completely that victory in the follow-on campaign was virtually assured. This first campaign thus offers richer insights into the practices of operational art. For this reason, the second campaign, usually called the "Battle of France," will be treated only as an epilogue. ←

This study finds that a one-sided claim of either German brilliance or Allied ineptness by itself cannot explain the outcome. Rather, both were complementary dimensions of the same phenomenon. In their planning and execution, the Allies--and especially the French--demonstrated a virtual bankruptcy of creativity, imagination, and understanding in applying military theory to operational art. Largely because of this, they failed to foresee that the calculus of war had changed fundamentally since World War I and that the Germans had developed dynamic, creative applications of new technology which rendered old methods anachronistic.

The Germans integrated new weapons such as the tank and the airplane into a concept of warfighting designed to defeat an opponent who fought in the slow, methodical style of World War I. From the perspective of military theory and operational art, German campaign planning and execution were superb. In the final analysis, their success was largely a triumph of the intellect. The vast gulf between Allied ineptness and German skill led to a strategically decisive result which swept France from the ranks of the great powers and propelled Germany into hegemony over Western and Central Europe.

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"Our leaders, or those who acted for them, were incapable of thinking in terms of a 'new' war.

In other words, the German triumph was, essentially a triumph of intellect--and it is that which makes it so peculiarly serious."

Marc Bloc 1

I. Introduction

Modern history records few events as astonishing as the rapid and overwhelming defeat of Allied forces in Western Europe during May and June 1940. A simple comparison of materiel and manpower offers no explanation. The Germans and the Allies were roughly equal in strength. The Allied defeat came about so suddenly and completely that even dedicated students of war found it scarcely comprehensible. To what can one attribute this "magnificent" German victory and this "catastrophic" Allied defeat? The question has remained a burning one, especially in France, where the disgrace and humiliation of this painful defeat still ignites passionate and polemic interpretations.

The purpose of this study is to analyze this campaign from the perspective of military theory in order to gain deeper insights into the practice of operational art. Hopefully, such insights will shed more light both on the enduring military questions associated with this campaign and, by extension, on the practice of operational art in general.

The Campaign in the West (1940) was really two separate campaigns conducted sequentially. The first, popularly called the "Battle of Flanders and Northern France (10 May-5 June)," is the central focus of this study. In this campaign the Germans broke the back of the Allied armies so completely that victory in the follow-on campaign was virtually assured. This first

campaign thus offers the richest insights into the practice of operational art. For this reason, the second campaign, usually termed the "Battle of France (5-25 June), will be treated only as an epilogue.

II. Strategic Setting

In September 1939, Germany invaded Poland. As a consequence, France and Great Britain, who had pledged to uphold Polish sovereignty, declared war on Germany and began to mobilize. Because of their military unpreparedness, the British and the French were unable to assist Poland directly. Nevertheless, by the end of 1939 the French had mobilized some five million men and fielded ninety-nine divisions. During the same time the British Expeditionary Force (BEF), consisting of nine divisions and sizable air force elements, had deployed to Northern France.

The French and the British--the Allies--were still at war with Germany, but it was not a "shooting war." Throughout the fall and winter of 1939-40, the Western Front was quiet. The expected German offensive never materialized although there were several alerts. The war seemed illusory for the Allied troops deployed on France's borders and soon became known as the Sitzkrieg, or "sitting war."

Belgium and the Netherlands carefully upheld their neutral status to avoid provoking the Germans. Consequently, they refused to work closely with the French and British forces to coordinate the details of common defense, although they intended to fight alongside the Allies if Germany invaded their countries.

In April 1940, German forces swiftly overran Denmark and invaded Norway. The Allies deployed a small expeditionary force to help the Norwegians, but it was unable to do more than hold on to the area around Narvik. It was still there in May 1940.

III. The Campaign Plans

When Hitler attacked Poland, he had no war plan to fight France or Britain. He regarded the Allied threat of war in the event of German aggression against Poland as a bluff. When war was declared, Hitler immediately directed the German Army High Command (the Oberkommando des Heeres, or OKH) to prepare a campaign plan against Western Europe. He intended to attack as soon as possible after conquering Poland.

OKH was far from sanguine about Germany's ability to take on Anglo-French forces so soon after the Polish campaign. Its leaders felt that the Army was neither adequately trained nor sufficiently equipped. They feared another stalemate war if Germany attacked prematurely. Despite these concerns Hitler directed OKH to complete the planning.

The resulting plan, published on 19 October 1939 with the code name of PLAN YELLOW, reflected OKH's deep-seated doubts. The plan sought only the capture of Belgium and the Netherlands as a protective buffer for the Ruhr, Germany's industrial heartland, and as an air-naval base for future operations against Britain. The plan (MAP A) called for Army Group B (9 panzer divisions, 4 motorized divisions, 30 infantry divisions) to conduct the main attack through the Low Countries. It was to defeat the Dutch and Belgian forces, and then meet "head-on" the left wing of the

Anglo-French forces, which were expected to advance into Belgium from Northern France. The intent was to drive them back across the Somme River. Army Group A (22 infantry divisions) was to mount a supporting attack through the Ardennes in order to protect the left flank of Army Group B. Hitler approved the plan, expecting that its successful execution would cause the Allies to sue for peace.

This version of PLAN YELLOW was never carried out. Adverse weather forced postponement of the operation repeatedly during November and December, allowing more time to debate the plan's soundness. The new chief of staff of Army Group A, Generalleutnant Erich von Manstein, opposed the plan because it offered no chance for a decisive victory. He proposed instead to direct the main attack farther south; rather than merely push the Allied left wing back, he wanted to encircle and annihilate it. OKH rejected Manstein's ideas, but a number of leading generals argued in their favor. Meanwhile, Hitler himself began to conceive of a powerful thrust through the Ardennes.

The impetus to reevaluate PLAN YELLOW received a big boost in January 1940, when a small plane carrying two Luftwaffe majors strayed into Belgium, ran out of fuel, and had to make a forced landing. On board were top secret documents relating to Germany's invasion of Belgium and the Netherlands. The documents fell into Allied hands and soon led to Dutch and Belgian mobilizations. With PLAN YELLOW compromised, Hitler ordered an indefinite postponement of the offensive with the intent to replan the whole operation "on a new basis."

This postponement, the compromise of the original plan, and Manstein's persuasive arguments had a telling effect on OKH. It conducted war games and found Manstein's concept feasible. In addition, it became increasingly clear that the Allies intended to advance into Belgium with their best units as soon as Germany attacked, thus setting themselves up for the kind of encirclement advocated by Manstein. Also, it became apparent that Anglo-French forces would not enter Belgium, an officially neutral state, until Germany violated its borders. This meant that any German thrust through the Ardennes could anticipate swift passage without meeting major enemy formations. Based on these considerations, OKH fleshed out Manstein's rough concept, modified and refined it, and cast it in the form of a new PLAN YELLOW. Hitler enthusiastically accepted it.

The new plan (MAP B) aimed at destroying Allied forces north and west of Sedan. Army Group B (30 divisions including 3 panzer divisions) was to attack into the Netherlands and defeat Dutch forces rapidly, while simultaneously striking through Belgium; its purpose was to draw the Allies' left wing, the bulk of Army Group 1, as far into Belgium as possible and then lock it in combat. The idea was to portray Army Group B as the German main effort, thus deceiving the Allies so as to achieve operational surprise later. Army Group A (7 panzer divisions, 3 motorized divisions, 35 infantry divisions) would meanwhile march rapidly through the Ardennes, cross the Meuse River on a broad front, and await further instructions; presumably, it was to continue the attack to the English Channel to complete the encirclement of the

Allied left wing. Army Group C (19 infantry divisions) was to remain on the defensive opposite the Maginot Line in order to tie down French forces there. An additional 42 infantry divisions would follow Army Group A in strategic reserve.

Within Army Group A, Rundstedt organized five of his panzer divisions and his three motorized divisions into a panzer group of three corps under Generalleutnant Ewald von Kleist.² This concentrated force of over 1264 tanks was designated as Army Group A's main effort. Within Panzer Group Kleist, General Guderian's XIX Panzer Corps (3 panzer divisions and a regiment of motorized infantry), followed closely by the XI Motorized Corps (3 motorized divisions), would make the main attack to cross the Meuse at Sedan; Generalleutnant Reinhardt's XLI Panzer Corps (2 panzer divisions) was to cross the Meuse farther north at Monthermé. Also within Army Group A was the XV Panzer Corps (2 panzer divisions), commanded by Generalleutnant Hoth. With its 524 tanks, this corps was to advance under the operational control of the Fourth Army to cross the Meuse at Dinant. Thus, the concentrated weight of Rundstedt's seven panzer divisions and three motorized divisions would be focused at three major crossing areas along a 50-mile stretch of the Meuse. The remaining 35 infantry divisions of Army Group A, organized into three field armies, were to follow as fast as forced marches allowed.

Unlike the German plan, The Allied war plan--developed mainly by the French High Command--did not seek an immediate decisive result because that was considered impossible.

Remembering the devastating effects of firepower in WW I, the French generals placed their faith in the overwhelming superiority of the defense over the offense. As a result, they adhered vigorously to the notion that a well-prepared, continuous line of defense would halt any German offensive, create a stalemate as in World War I and cause the Germans to suffer disproportionate casualties. In the meantime, the Allies would gear up their economic and military might so that they would eventually overwhelm the Germans in a strategic offensive of their own. The Allied aim in the short term was thus not to score a knockout blow against Germany, but rather to prevent the Germans from scoring one.

The French expected the main German thrust to come through Belgium as in World War I. In their view, the strong fortifications along the Maginot Line rendered any German offensive against it hopeless, while the Ardennes area was thought too constrictive to support a massive movement of troops. Therefore, the Germans had to mount their main thrust through the Low Countries.

General Maurice Gamelin, the wartime Allied Commander-in-Chief, had by November 1939 developed the so-called Dyle Plan. According to the plan, the Allied left wing would advance into Belgium and occupy defensive positions to be prepared by Belgian forces along a line running behind the Dyle and Meuse Rivers. The distance involved posed a real challenge. Could the Dyle Line be reached and strengthened before the Germans arrived? The French assumed that the Belgian forces could hold their forward

defenses along the German border for at least five days before having to fall back to the Dyle Line. This would provide the time needed by Anglo-French forces to get into position.

Once fully occupied, the Dyle defenses would consist of five armies disposed as follows, from west to east (MAP C): The Belgian Army (22 divisions), the BEF (9 [motorized] divisions, 1 tank brigade), the First French Army (4 infantry divs., two light mechanized divs., 3 motorized divs., 1 fortress div.), the French Ninth Army (5 infantry divs., 1 motorized infantry div., 2 cavalry divs.), and the French Second Army (5 infantry divs., 2 cavalry divs.). Army Groups 2 and 3 defended the Maginot Line with four armies (43 divs.). The French Seventh Army (2 motorized infantry divs., 1 light mechanized div., 4 infantry div.) was to serve as a mobile reserve, backed up by a strategic reserve of 22 divs., including three newly-formed armored divisions. Thus, the Allied plan both sent powerful forces into Belgium and retained a large, mobile reserve to deal with the unexpected. Gamelin, however, soon committed the best of those reserves.

Although the Dyle Plan brought Allied forces quickly to assist the Belgian Army, it offered to provide no real support for the ten Dutch divisions fighting farther north. Gamelin was so concerned about this that in March 1940 he added the Breda Variant to the war plan. The Seventh Army was now to advance 100 miles beyond the Dyle Line along the Channel Coast into the Netherlands to the vicinity of Breda-Moerdijk. By so doing, it was to act as a connecting link between the Dyle Line and the Dutch forces, giving the latter the additional support and

encouragement needed to keep them in the war. Army Group I was also given two armored divisions and two infantry divisions from the strategic reserve to assist it with the resulting extended frontage. Thus, while the Dyle Plan committed nineteen Allied divisions into the Low Countries, the Breda Variant committed thirty. The Breda Variant reduced the mobile forces in the strategic reserve to one undertrained and underequipped armored division and one motorized division available for employment in Northern France. Herein lay seeds of disaster.

The German and French war plans offer considerable food for thought concerning the concept of a center of gravity. Clausewitz suggested that a force's center of gravity conveys the notion of density of mass and the ability to generate combat power at decisive points. A blow which unbalances an enemy's center of gravity will ultimately destroy the coherence of his attack or defense. Such a blow is most effectively rendered by one's own center of gravity, "the hub of all [combat] power and movement." Clausewitz emphasized that determining the enemy's center of gravity and concentrating enough force against it to cause its overthrow is central to the art of campaigning, that is, operational art. At the same time, he noted, one must take all precautions to protect one's own center of gravity. He asserted further that every major battle (and, by extension, every campaign) involves collisions between opposing centers of gravity.³

The Germans correctly identified the Allied center of gravity as its left wing, those forces of Army Group I advancing

into Belgium. This wing contained their best-trained, best-equipped forces. It contained most of the Allies' mobile forces as well. Included were all three French light mechanized divisions (each having 174 tanks and roughly the equivalent of a light panzer division), two of the three armored divisions (150 tanks each), several British tank-heavy brigades and regiments (620 tanks), and 14 out of 16 British and French motorized divisions. The unhinging of this force would defeat the Allied defense plan; the destruction of this force would effectively end the Allied coalition and make it impossible for the French Army to reconstitute a viable defense. This would bring the war to a rapid conclusion.

The Germans considered their strategic center of gravity to be Army Group A, together with all its allocated air support. PLAN YELLOW sought to focus this force initially against the weakest part of the French defenses, the area manned by the Ninth and Second Armies. The concept was to shatter those formations, race to the Channel against only light resistance, and encircle the Allied strategic center of gravity. This is an example of the indirect approach. The Germans wanted to maneuver their center of gravity initially against French weakness, avoiding enemy strength until their center of gravity was in position to strike a crushing blow against the exposed rear and flank of the opposing center of gravity while it was locked in combat frontally. If Army Group C (19 divs.) were able to hold the French divisions opposite it in the Maginot Line (43 divs.) from entering the battle, this plan would enable the Germans to

concentrate 107 divisions against 74 Allied divisions in a way that their opponents could be defeated piecemeal and sequentially in a series of battles and engagements--in each instance by overwhelmingly superior combat power. By so doing, the Germans were also protecting their own center of gravity, committing it only when the odds were strongly in its favor. Such thinking is the essence of sound campaign planning.

Unlike the Germans, the Allies intended to use a direct approach to meet the enemy's strategic center of gravity head-on with their own. They sought to meet strength with strength. While such an approach seldom produces decisive results, it was consistent with the Allied aim--to produce a stalemate. The critical failure was in misidentifying the German center of gravity.

Because the Allies were so convinced that the main German thrust would come through the Low Countries, they failed to do any real contingency planning. They had no branches to their plan--for example, in the event that the main thrust came through the Ardennes. If that happened, it was argued, the Germans would take so long to reach the Meuse, let alone attack across it, that the Allies would have plenty of warning to redeploy forces; ad hoc planning was to be more than adequate because there would be so much time to react. For this reason, there was little Allied concern about retaining a large mobile reserve; the mobile forces advancing into Belgium could be redeployed to handle major unexpected threats. The premise behind this thinking was that the tempo of war had not changed dramatically from that of WW I.

As events would quickly show, this premise was fatally flawed.

The Allied plan was based on several other ironclad assumptions which, in effect, attempted to factor out uncertainty from the equation of war. The French went to war in 1940 confident that they would master any situation which might develop. Warfighting is an inherently uncertain and risky enterprise. Such uncertainty is heightened when one assumes the strategic defensive and yields the initiative to the enemy from the onset, as the Allies did. By failing to maintain a sizable mobile reserve, Gamelin largely deprived himself of the means to influence events if any of his major assumptions proved false, or if the combined effects of the unknown, friction, the fog of war, chance, and deception created unanticipated threats or opportunities. Branch plans and an adequate reserve are thus essential ingredients in preserving a commander's freedom of action.

The German and Allied war plans suggest a theoretical structure with which to view the battlefield. Jomini characterized a theater of war as encompassing all the territory of the conflict. For both sides in this war, the theater of war included the Low Countries, France, and Germany west of the Rhine. A theater of operations, wrote Jomini, is a sector of the whole war area in which major subordinate formations operate with a certain degree of independence; one could add that it is the scene of integrated ground and air forces directed toward the attainment of operational goals. Formations which define theaters of operation thus formulate their own campaign plans.

For both the Germans and the Allies, the army groups' areas of responsibility constituted theaters of operations. All the army groups prepared their own campaign plans based on the overall war plan. Additionally, it was at the army group level that air and ground operations were initially integrated toward the achievement of military-strategic goals.⁴

A zone of operations is a major contiguous portion of a theater of operations in which a formation integrates air-ground operations to achieve major portions of campaign aims. Given this definition, the field armies' areas of responsibility for both sides in this conflict constituted zones of operations.⁵ It was there that major operations--that is, the process of linking battles and major unit movements to form major phases of campaigns--were conducted. Lastly, the concept of theater of battle must be defined as that contiguous portion of a zone of operations in which a formation fights battles, a series of related engagements. In this war, the areas of responsibility of the corps, and occasionally those of the divisions, should be characterized as theaters of battle. It was at this command level that battles were fought. Divisions, brigades, regiments and battalions generally fought the engagements--that is, localized combat encounters of relatively short duration.

IV. The Clash of Arms

The German offensive opened with stunning success. In the early hours of 10 May, the Luftwaffe destroyed most of the small Belgian and Dutch air forces on the ground and seriously weakened Anglo-French air strength by raiding over fifty airfields in

France. The result was the rapid establishment of air superiority. Shortly thereafter German paratroops and air-landed forces descended on the Hague, Rotterdam, Moerdijk, and Dordrecht, seizing airfields and key bridges. The Dutch, recovering from their surprise, struck back in force at the airheads, but the Germans there, receiving massive Luftwaffe support, held on to most of their gains. Meanwhile, Eighteenth Army (1 panzer div., 9 infantry divs.) of Army Group B seized a railroad bridge intact and penetrated the Dutch initial defensive line, forcing its abandonment late on 10 May. By 12 May, panzer units had linked up with the airborne elements holding the key bridges at Moerdijk and Dordrecht, effectively cutting off the French Seventh Army from any hopes of linking up with the Dutch Army toward which it was advancing. Thus, the Breda Variant was already a lost cause. The shattered remnants of the Dutch forces fell back toward Rotterdam, where they surrendered on 14 May, five days into the campaign.

Army Group B's main attack was made by the Sixth Army (2 panzer divs., 21 infantry divs.) along the Maastricht-Liege approach. Airborne forces quickly captured Fort Eben-Emael and key bridges over the Albert Canal and Maas River. The Germans immediately exploited with panzer spearheads driving toward Liege and the Dyle River. With their forward defense line decisively penetrated by mobile forces at multiple locations, the Belgians were forced to fall back toward the Dyle Line on 11 May.

These vigorous German thrusts, supported by overwhelming air power, convinced Gamelin of something he wanted to believe--that

Army Group B was the German main effort. German successes were already threatening to unravel the entire French war plan. The Breda Variant had failed. Dutch and Belgian forces had quickly given up fortified defensive lines which were supposed to hold for a long time. It was becoming a concern whether the Anglo-French forces could reach the Dyle Line before the Germans. The attention of the Allied High Command became riveted even more intensely and narrowly on developments in the Low Countries. Of course, this was exactly what the Germans wanted.

Completely unhindered by Luftwaffe interdiction, the Allied left wing reached the Dyle Line on 12 May. To their horror, however, the Anglo-French forces discovered that the Belgians had failed to construct the fortified positions in depth along this line as promised. This was a colossal failure in Allied coordination which undermined a key assumption--that the German attack would be met from behind prepared defensive positions. Hectically, hasty positions were prepared as General Piroux's French Cavalry Corps (two light mechanized divs.), deployed forward to buy as much time as possible. This Corps had over 300 tanks, but its mission necessitated dispersion across a broad frontage. In addition, this corps was required not just to screen, as originally planned, but to defend and delay as long as possible against overwhelming odds. Piroux's unit performed brilliantly. Fighting tenaciously, it inflicted disproportionate casualties on the Germans and was able to delay their arrival at the Dyle Line until 15 May.

While Army Group B and Army Group I were preparing to lock

horns in Belgium, Army Group A moved to the Meuse even faster than expected by the most optimistic German planners. Moving along three routes, its lead elements reached the river by nightfall on 12 May. French cavalry and the rugged Ardennes terrain had only imperceptibly slowed the march. The two French cavalry corps (each consisting of two cavalry divisions) sent to the Ardennes east of the Meuse were ineffective in slowing the Germans for several reasons. They lacked air support while the German columns enjoyed massive support. The German advance was spearheaded by armor-heavy forces which rapidly gained fire superiority over and outmaneuvered the French cavalry at every point of contact. Lastly, the French cavalry was focused on withdrawing back across the Meuse in time so that all the bridges would be blown before the Germans arrived. The French cavalry thus fell back rather rapidly, avoiding decisive engagement.

If Army Group A was the German strategic center of gravity, then Army Group A's operational center of gravity was its mobile forces spearheading the advance, combined with all the air power supporting them. In terms of ground forces, this center of gravity consisted of Hoth's XV Panzer Corps moving toward Dinant, and the three corps composing Panzer Group Kleist: Reinhardt's XLI Panzer Corps headed for Montherme, Guderian's XIX Panzer Corps closing on Sedan, and Generalleutnant Wietersheim's XIV Motorized Corps following Guderian. The success of Army Group A's campaign plan was inextricably linked to the success of these forces. Success hinged on the kind of speed, shock power, and firepower which only mobile forces, backed by copious air

support, could provide. The defeat of this force would mean the defeat of Army Group A's plan; this, in turn, would mean the strategic failure of the entire German war plan. One sees here a direct linkage between the operational and strategic centers of gravity, as well as between the aims associated with each.

One can discern a tactical center of gravity within Army Group A's operational center of gravity: Guderian's XIX Panzer Corps together with all its air support. Its attack, directed at Sedan, was Panzer Group Kleist's designated Schwerpunkt.⁶ This force had three of the seven panzer divisions within Army Group A's operational center of gravity. The defeat of this force would leave the operational center of gravity with insufficient strength, both on the ground and in the air, to accomplish its mission in the time required. Furthermore, the defeat of this force would deny access to the major valleys in Northern France through which the main German thrust would have to go in order to reach the Channel Coast fast enough. Also, if Guderian failed, the remaining forces in the operational center of gravity would be extremely vulnerable to Allied counteroffensives from the south. One again sees a direct relationship between centers of gravity--in this case between the tactical and the operational.

Army Group A's spearhead was about to thrust into the weakest defended area of the entire Allied line: the area along the Meuse River from Dinant to Sedan (Map D). The French forces there, the Ninth Army under General Corap in the north and the Second Army under General Huntziger in the south, were predominately reservist. They were undertrained and

underequipped--possessing few tanks, antiaircraft guns, or antitank guns. This was supposed to have been the "sleepy" part of the line; few took seriously the prospect of a serious German attack there. The Ninth Army's forces, advancing from Northern France to take up their positions along the Meuse in Belgium, were not fully in position when the Germans arrived. In the south, Huntziger's forces opposite Sedan, owing to a belated reshuffling of divisions, were still not settled into their positions.

In the view of most French commanders, there was cause for concern, but certainly not for alarm. While enemy lead elements had reached the Meuse, it was a long-standing assumption that the Germans would require at least five more days to concentrate enough infantry, heavy artillery, bridging, and ammunition to force a crossing. After all, the river was viewed as an ideal tank ditch. Consequently, French reactions lacked a real sense of urgency at all levels during the next few days. There seemed plenty of time to occupy assigned positions and bring up additional reserves. All still seemed well in hand.

Gamelin remained convinced that the main German thrust was developing through the Low Countries. The Germans wisely allocated enough forces to Army Group B, including massive air support in the opening days, to make that assumption believable. Their plan for an early "knockout blow" against the Dutch and a swift breakthrough of the initial Belgian defenses was all designed to "confirm" Anglo-French expectations. Thus, the German thrust through the Ardennes was assessed initially as

little more than a stronger-than-anticipated supporting attack.

One finds in this instance strong evidence for the contention that the best deception plans are those which encourage an opponent to believe what he is already predisposed to believe. The Allied air reconnaissance effort over the Ardennes was largely superficial. Nonetheless, some pilots reported seeing at night long columns of vehicles with headlights on advancing toward the Meuse. The columns were over a hundred miles long. For the most part, these reports were dismissed as wild exaggerations. The Allied intelligence effort was oriented more toward confirming the anticipated than toward an objective search for truth. This was a sure sign that assumptions had become entrenched beliefs.

German actions along the Meuse failed to conform to French expectations. On 13 May, the Germans gained three footholds across the river--at Houx (near Dinant), Monthermé, and Sedan. At this stage, the German gains were very tenuous, vulnerable to a determined counterattack. Only small infantry units with no tanks or heavy guns were across. But no counterattacks came. The French commanders were content to contain the bridgeheads and to await the arrival of reinforcements. Thus, the French let a valuable opportunity slip by.

At Sedan, Guderian's crossing was supported by virtually all available medium bombers and Stuka dive bombers on the Western Front. They came wave-after-wave all afternoon on 13 May, constantly bombarding and neutralizing French artillery positions while the crossings took place. The bombers were accompanied by

enough fighters to sweep the French air force from the surrounding skies. These continuous attacks had a devastating psychological effect on the defenders' morale; the full impact was felt that evening, when rumors of German tanks across the river started a cascading panic that caused the two divisions and the corps artillery opposing Guderian to abandon their positions and flee to the rear.

This German attack at Sedan illustrates the notion of a combination-- the action of two or more combat units whose actions are synchronized in time and space to achieve a synergistic effect vis-à-vis an enemy force. In this case, the two forces involved were the supporting Luftwaffe elements and Guderian's troops conducting the river crossing. This is what could be termed an air-ground combination. By themselves, the assault troops were outnumbered by the defenders, who fought from bunkers and trenches supported by substantial artillery. There was no reason to expect the assault troops to throw back the defenders and seize a sizable bridgehead, especially since most of Guderian's artillery had not yet arrived. By themselves, the air attacks would hardly have been decisive. In conjunction with the ground assault, however, the aerial bombardment forced the defenders "to ground", neutralized effective French direct and indirect fires, and allowed the assault troops to secure a bridgehead in short order. The combined effect of the air and ground assaults, focused at the same point and time, was much greater than the sum of their individual actions, had they been focused simultaneously at different points or at the same point

but at different times.

On 14 May, German armor poured across the Meuse into the three bridgeheads. Attacking vigorously to the west, the armored spearheads began to shatter the center and left of Ninth Army's line. At this point, the French had three out of their four armored divisions and a mechanized division en route to, or already in, the vicinity. Gamelin had ordered them to move on 12 May, with the idea that they would be allocated to the Second and Ninth Armies for employment in counterattacks. What happened next was a comedy of errors. The 3d Armored Division and the 3d Light Mechanized Division arrived just south of Sedan early on 14 May; but rather than counterattack, these forces were dispersed in a twelve-mile long defensive line south of Stonne. This allowed Guderian to bring across the bulk of his combat power and fortify his southern flank. The French had missed the opportunity to strike Guderian in force when he had very little armor on the west bank. For unexplained reasons, the French 3d Armored Division and 3d Light Mechanized Division never counterattacked. Instead they were employed defensively to protect the rear approaches to the Maginot Line. On 14 May, Hoth's XV Panzer Corps penetrated Ninth Army's left flank, exploited deep, and found the 1st Armored Division, which was moving forward to counterattack. Unfortunately for the French, the Germans arrived as the division was refueling and destroyed it in place. The next day, Reinhardt's XLI Panzer Corps surprised and destroyed the 2d Armored Division as it was moving forward administratively by road and rail. In effect, Gamelin

committed his only available mobile reserves with no real plan to concentrate them at specific points. They were sent to reinforce the two threatened French armies without any provision to coordinate the ensuing counterattacks. The result was a disjointed "pushing" of forces forward which failed to create an operational center of gravity. This led to the piecemeal destruction of these armored reserves by overwhelmingly superior forces. While such a use of reserves was in step with French doctrine, it was out of step for the character of war which the Germans were conducting.

Late on 14 May, Corap ordered a general withdrawal to a new defensive line some 12-16 miles to the east. The full force of friction was evident in the ensuing events. Contradictory orders were issued about the location of the new line; some units were never informed; some units were overrun en route by the advancing panzers; and some units just panicked. The end result was the dissipation of combat power and the hopeless disintegration of Ninth Army. Overnight, it simply disappeared as a coherent fighting force. If friction involves the debilitating wastage of combat power in the process of accomplishing some task, then this turn of events may serve as a supreme example.

While Ninth Army was disintegrating, the Second Army, its left wing shattered, fell back to the south. This opened up a fifty-mile gap in the Allied defenses in exactly the direction Army Group A intended to advance. With three panzer spearheads roughly abreast, the Germans marched swiftly westward on 15 May.

Not until late on 15 May did General Gamelin realize the

full gravity of the situation. Before then, he appears to have cherished the illusion that the German attack across the Meuse could be stopped and the front stabilized.⁷ There were two major reasons for this. First, Gamelin set up a new command structure in January 1940 which essentially isolated him, the primary military decision-maker, from developments on the battlefield. For reasons still unclear, he divided the French High Command's single headquarters into three smaller ones: Gamelin, as Allied Commander-in-Chief, kept most of the Intelligence Division and part of the Operations Division at his headquarters in Vincennes (near Paris). He designated his deputy, General Georges, as Commander-in-Chief of the Northeast, giving him direct command over French forces in Northern France (minus the strategic reserves); Georges received for his headquarters in LeFerte (40 miles east of Paris) the rest of the Operations and Intelligence Divisions. A third headquarters, GHQ Land Forces, was placed under General Doumenc, and located at Montry, about midway between the other two. This headquarters contained the Supply and Transport Divisions. Thus, Gamelin created another command tier between himself and the fighting units, and created confusion among subordinate commands regarding where to send various reports. Neither Gamelin's nor George's intelligence and operations sections were large enough to digest incoming reports and make the necessary assessments. Response was slow. At his headquarters, Gamelin had no radios or teletypes. All communication was dependent on couriers and a limited number of telephone lines, which proved inadequate for passing large

amounts of information in a timely fashion. As a result, information was many hours old by the time it reached Gamelin or Georges.

Second, senior French commanders at all levels were stunned by the tempo of the German advance. Repeatedly, they issued instructions to fall back to new positions which the panzers had already seized. By WW I standards, Gamelin's dispatch of the 1st, 2d, and 3d Armored Divisions to the Meuse on 12 May should have taken care of the threat. However, the German pace of advance was so fast and the penetrations were so deep that it was beyond French comprehension that most of these formations could be destroyed piecemeal en route. There should have been plenty of time to move forward and get set before encountering the Germans. Neither Gamelin nor most of his generals had imagined such tempos possible. As an outgrowth of such thinking, French commanders along the Meuse often sent "rosy" reports to Gamelin and Georges, especially from 12 to 14 May. The actions taken, it was asserted, were certain to stop the enemy. Only when they were fully engulfed in catastrophe did these commanders forward truly realistic assessments. As a consequence, French commanders were late in anticipating German movements and in formulating timely responses. It seemed that every order was hopelessly overcome by events, given the time it took to transmit, coordinate, and execute it. It was as if French command at all levels operated in slow motion while their adversaries worked at normal speed.⁸

Now, realizing disaster at hand, Gamelin activated the Sixth

Army Headquarters under General Touchon on 15 May. It was to assume control over elements from Corap's army which, in fact, had already disintegrated. Touchon was also to assume command of several infantry divisions which Gamelin was ordering to move from behind the Maginot Line to the threatened breakthrough area. Given the pace of the German advance, those divisions had no realistic prospect of arriving in time to affect the outcome. Again, Gamelin was largely out of touch with the situation at the front. Surprisingly he did not order the Allied left wing to fall back from Belgium to Northern France. Had Gamelin done so at this point, it is conceivable that the decisive encirclement sought by the Germans could still have been avoided. But Gamelin did not fully realize the German intentions. He thought their objective was Paris, not the Channel Coast. His focus was on the immediate task of reconstituting a defensive line in the east; he failed to consider adequately what to do if that effort failed. In this, he was guilty of one of the greatest faults of the operational commander, myopia--the failure to anticipate, plan, and act in the near term in order to shape favorable situations at least several days into the future. By WW I standards he did not yet have to think of pulling back from Belgium; there seemed to be plenty of time before that decision had to be made. The problem was that WW I standards did not apply. The time to act was already at hand.

On 17 May, both OKH and Rundstedt became very concerned about the possibility of a French counterattack from the Verdun-^{Chalons} area against the lightly-held base of Guderian's salient.

Guderian was ordered to halt until the Twelfth and Sixteenth German Armies, which were foot-mobile and which had fallen far behind the panzers, crossed the Meuse and began securing Army Group A's left flank. Guderian exploded with rage; he correctly sensed that the French were in disarray and that a continued swift advance would secure a great victory of annihilation. To halt now, he argued, would allow the enemy precious time to recover and redeploy, perhaps enabling him to reestablish a viable defense line. He was given permission to conduct a "reconnaissance in force," under the guise of which his entire corps advanced at full speed. No French counterattack came.

Historians rightfully credit Guderian with real genius in assessing the situation, and in exercising determination to follow through with the plan at a point when his superiors were taking counsel of their fears. His actions, in effect a direct violation of orders, maintained the momentum of the attack and placed his corps in a position to spring the trap on Army Group I before it could escape. His actions must be contrasted with those of Georges and Gamelin, who failed to orchestrate a strong counterattack from Verdun toward Sedan. Such an attack, had it developed before 18 May, would surely have forced OKH to halt Guderian and redirect a significant portion of his force back toward Sedan. Here again, the French missed a golden opportunity to wrest initiative from the Germans.

By 19 May, the German Twelfth and Sixteenth Armies were lining the southern flank across the Meuse. The next day, Guderian's spearhead secured the Abbeville area adjacent to the

Channel Coast (MAP D). The corridor to the sea, although tenuous, was established. The rest of Panzer Group Kleist soon arrived to widen it. The Allied left wing's lines of communications to Northern France were severed. Within a few days, the German Second and Ninth Armies arrived to protect the extended southern flank of Army Group A.

In the meantime, on 18 May Gamelin had finally realized the German intent to destroy the Allied left wing. He worked with Georges to develop a plan for a concerted attack against the spearhead of Panzer Group Kleist. Army Group 1 would attack southward in force against the flank and rear of Army Group Kleist as it approached the Coast. This plan had some merit and might have enjoyed some success if it had been executed on 18 or 19 May, when Guderian's salient was narrow and vulnerable.

This plan was placed on "hold" when General Maxime Weygand replaced Gamelin on 19 May. Weygand, astonishingly impervious to the need for immediate decisions, decided to allow a few days to make his own assessment before issuing any orders. Like Gamelin, he was completely out of touch with the pace of events.

Actions by Army Group 1 became increasingly disjointed and uncoordinated. The BEF conducted a limited counterattack south near Arras on 21 May, unsupported by the French First Army. On 22 May, the First Army attacked near Cambrai, unsupported by the British. These unsuccessful, limited efforts spent the remaining offensive power of the Allied left wing.

Nevertheless, Weygand announced his so-called "Weygand Plan" on 22 May. It envisioned the reconstituted French Seventh Army

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south of the Somme attacking northward the next day to link up with a strong Army Group 1 attack southward. It was a pipedream. By that time, the Germans had 7 panzer divisions and 3 motorized divisions in the area of the proposed counterattack with two infantry armies about to arrive. Army Group 1's attack never materialized, while that of the Seventh Army was promptly repelled.

Attacked vigorously on all sides and in the air as well as cut off from supplies, Army Group 1's position steadily deteriorated. By now it faced the combined strength of two German army groups and virtually all available Luftwaffe planes. The end was in sight when on 24 May Hitler halted the advance of all ten panzer divisions, allowing the British to stiffen their defenses and begin a withdrawal to Dunkirk. This halt order was one of Hitler's most controversial decisions, and was issued over the protests of OKH. It is clear, however, that Rundstedt and Kleist supported the decision. Apparently they were concerned with readying the panzer forces for the upcoming campaign into the heart of France. Hitler also considered the marshy Dunkirk terrain unsuitable for armor. Furthermore, he considered the infantry, supported by virtually the entire Luftwaffe, capable of completing the destruction of Army Group 1. That the French and British navies would be able to evacuate so many from the Dunkirk beaches was unfathomable to the German leadership before the fact.

On May 26, Hitler lifted the halt order for the panzers. Near the coast, the improved British defenses and flooded

achieve a true synergistic effect. In short, to use a physics analogy, they got no real leverage or mechanical advantage from their combat power. The Allies sought to apply strength against strength. They miscalculated that such an approach would be adequate.

This campaign also illustrates the idea of a decisive point. This notion must be considered along with the concepts of mass, concentration, synchronization, and center of gravity. Decisive points are points the potential seizure of which in the offense (or the retention of which in the defense) promises to have a marked influence on the outcome of an engagement, battle, major operation, or campaign. Those decisive points which a commander decides to seize or retain form a subset called objective points. A key challenge to the campaign planner is to choose those objective points the seizure or retention of which will best accomplish the aims of the campaign. This involves the concentration of combat power, synchronized in time, to achieve local superiority--preferably overwhelming superiority--at an objective point. Operational art involves linking the seizure or retention of objective points, simultaneously or in sequence, so as to expose the enemy's center of gravity to destruction while protecting one's own center of gravity. Ideally, this involves massing the combat power of one's center of gravity at a series of objective points over time; the aggregate effect of this should place the opposing force's center of gravity in a position of extreme disadvantage--causing a cascading decline in its ability to focus combat power and thereby setting up its

destruction.9

In this campaign, Army Group A's crucial objective points were the major crossing sites over the Meuse, as well as Abbeville near the Channel Coast. It focused its center of gravity--its panzer and motorized infantry divisions plus all available air support--at these points to achieve local superiority. The aggregate effect was to position the German strategic center of gravity such that it could strike a mortal blow into the vulnerable flank and rear of Army Group 1, the Allied strategic center of gravity.

According to the Allied war plan, virtually every potential main avenue of approach for the Germans into the Allied defenses--from the Channel Coast to Switzerland--was, in effect, considered an objective point. The Allies planned simply to hold along the entire line. In short, they expected to be strong everywhere. In fact, they were insufficiently strong at the objective points chosen by the Germans. As suggested earlier, the notion of an objective point is linked with the concepts of mass and concentration. By making every potential decisive point an objective point, the Allies failed to appreciate the need to concentrate combat power to achieve superiority at selected points. The Allies simply diluted their combat power.

Moreover, this failure was deeply rooted in doctrine, especially for the French. For them, the lessons of WW I emphasized the destructiveness of firepower, the strength of the defense, and the ascendancy of the methodical battle. Defense had become synonymous with the concentration of firepower. New

weapons such as the tank and the antitank gun were integrated into formations so as to "thicken" the infantry-artillery firepower combination as in World War I. The French tank was generally considered an infantry support weapon. It had none of the features which would allow it to operate in larger, massed armor formations over extended distances. It was slow, had a short cruising range, and mounted no radio. Armor doctrine stressed the use of tanks in a widely dispersed fashion, especially in the defense.

French doctrine lacked an appreciation for the large, mobile force to act as an operational reserve. After the battles of the Marne, the French front in WW I was never again decisively broken. Most German penetrations were shallow, or tactical, in nature. They were contained and defeated by providing reinforcements to front-line divisions and corps, which orchestrated a series of tactical counterattacks. The French assumed that in the future the dominance of defensive firepower would make any enemy attack a slow process. French commanders would have ample time to reinforce front-line forces to prevent a deep penetration. For this reason, the newly-formed armored divisions were not structured for independent operations; they had only a modicum of infantry and artillery and only a very primitive communications capability. In the counterattack, their role was not to act in concert with other armored divisions, but to assist in the advance of larger infantry-heavy formations--usually corps or infantry divisions.¹⁰

The use of aircraft for direct support of ground units,

thereby increasing applied combat power exponentially at decisive points, was not envisioned. Fighter aircraft were intended to escort bombers and fight enemy aircraft. Bombers were intended for interdiction missions or strategic bombing behind enemy lines. As a result, aircraft were dispersed to provide continuous antiaircraft, interdiction, and reconnaissance support for all the front-line armies in roughly equal proportion. Consequently, they were vastly outnumbered by the concentrated massing of German aircraft at objective points.¹¹ At Sedan, for example, French troops differentiated friendly from enemy planes as follows: If the planes appeared in formations of forty, they were German; if the planes appeared in groups of two or three, they were French.¹²

Finally, this campaign causes one to reflect upon Clausewitz's famous assertion that "the defensive form of warfare is intrinsically stronger than the offensive." If this is so, then how can one explain the French defeat? In order to address this question, two concepts must be considered: the culminating point of the attack and the culminating point of the defense. In essence, Clausewitz suggested that the attacker loses combat power at a faster rate than the defender, all things being equal. The attacker could, therefore, reach a point of exhaustion where he no longer has the means to sustain the attack and beyond which continued offensive operations risk overextension, counterattack and defeat. This is termed the culminating point of the attack. The culminating point of the defense is reached when the defender accrues no advantages in waiting further. This culminating point

usually occurs when the defensive positions are at the point of being fractured--(i.e., when the defender's inertia is being broken). The French were convinced that the great lesson of WW I was the devastating, dominant role of defensive firepower, especially from prepared positions. They believed that no rapid operational breakthrough was possible. Defensive firepower would exhaust any attacker and force him to this culminating point before the defense was penetrated beyond tactical depth. This would allow time for reserves to be brought up to contain the penetration, and eventually to reduce it via limited-objective counterattack.¹³

The Germans, however, developed what is often termed "Blitzkrieg tactics," which involved the concentration of such massive combat power at objective points that they could overwhelm the defenders and achieve deep breakthroughs. Even more important, this could be done so swiftly that the defender's reserves would be unable to arrive before the defenses were fractured beyond repair. In brief, the Germans found the doctrinal formula--based on speed, mass, and concentration--to cause a defender, fighting in the French style, to reach his culminating point before the attacker, fighting in the German style, reached his culminating point.

V. Epilogue: The Second Campaign

Following the defeat of Army Group 1, German forces redeployed for a follow-on campaign aimed at France's total military collapse. Hitler had issued a new war directive on 28 May with the code name of PLAN RED. On 5 June the Germans

attacked. The outcome came as no surprise. The Allies were now greatly outnumbered. The French could field but 65 divisions (including three partially reconstituted armored divisions and three weakened cavalry divisions). Of these, 17 were fortress troops or second-line reserve formations. Many were understrength, and most were short key equipment. Morale was generally low. The British had units equivalent to two divisions in line on the Lower Somme. Against these forces, the Germans had 143 divisions (including ten refurbished panzer divisions) to employ. In addition, the Luftwaffe enjoyed complete air superiority.

In the West, Army Group B (50 divs.) mounted the main supporting attack on 5 June (MAP E). It was to drive rapidly to the Seine River, after which a decision would be made about the ultimate direction of its attack. Army Group A (45 divs. including 4 panzer divs.) was to mount the main attack four days later to separate Army Groups 2 and 4 and to pin the former against the Maginot Line. On 14 June, Army Group C (24 divs.) was to attack through the Maginot Line at Saarbruecken and Colmar; it was to link up with Army Group A to encircle French forces behind the Maginot Line.

The Allies fought tenaciously, but had lacked enough time to build a credible defense-in-depth. With so few mobile forces, the Allies were incapable of falling back and reconstituting a viable defense once the Germans penetrated their initial lines in force. In the west, Army Group B quickly ruptured the Allied line near Abbeville and exploited with several corps, reaching

the Seine by 9 June. In the eastern portion of Army Group B's zone, the French defenses held on stubbornly at first, denying a clean breakthrough to Panzer Group Kleist (reconfigured with 4 panzer divs. and organized into 2 panzer corps), which led the assault. However, on 8 June Weygand ordered Army Group 3 to fall back to the Seine in the attempt to reestablish a continuous defense line in the west. Already the French were reeling when on 9 June Army Group A attacked. After heavy fighting, Panzer Group Guderian (4 panzer divs. organized into two panzer corps) broke through at Chalons and raced southward. To his right, Panzer Group Kleist broke through at Chateau-Thierry in Army Group B's area and also exploited southward. This sealed the fate of the French armies. The French attempted a retreat, but it soon turned into a rout. These two panzer groups immediately went into the pursuit.

Meanwhile, Army Group B's panzers overran Brittany and Normandy, forced the remaining British forces to evacuate by sea from Cherbourg, and captured Paris. By 17 June, Kleist's and Guderian's Panzer Groups (now both under Army Group A) had reached the Loire River at Nevers and the Swiss border respectively. This meant that French troops near the Maginot Line were surrounded. Guderian attacked north and east to reduce the pocket, while Kleist continued the pursuit southward. In the far east, Army Group C penetrated the Maginot Line at Saarbruecken and Colmar (14-15 June) to assist in the encirclement of French Army Group 4. The entire French Army was now either surrounded, or reeling in complete disarray with

strong German forces hot on its trail. The end was near. The French asked for an armistice on 17 June, and it took effect on 25 June. So ended the grand campaign in the West.

It is important to emphasize that the German PLAN RED was a second war plan which was not developed until PLAN YELLOW was well underway. It was not seriously envisioned before 10 May. It was developed as a sequel to exploit German success in the first campaign by completely destroying the French capacity to resist further in the second. The strategic aim of PLAN RED was much more far-reaching than that of PLAN YELLOW, which only sought to force France and Britain to make peace based on their setbacks in Northern France and the Low Countries. PLAN RED sought a dictated peace based on decisive victory and the near-total conquest of all France.

Operational art is usually defined in terms of linking battles and major operations to achieve campaign goals. In this instance, the Germans demonstrated that operational art may also involve linking separate campaigns within the context of a grand campaign to achieve military-strategic goals in a theater of war.

VI. Conclusion

The more one studies this campaign, the clearer it becomes that the claim of either German brilliance or Allied ineptness by itself cannot explain the outcome. Both were operative factors. They were two complementary dimensions of the same phenomenon.

The Germans developed a doctrine and a corresponding force structure during the interwar years which promised to restore the kind of mobility to the battlefield which had disappeared on the

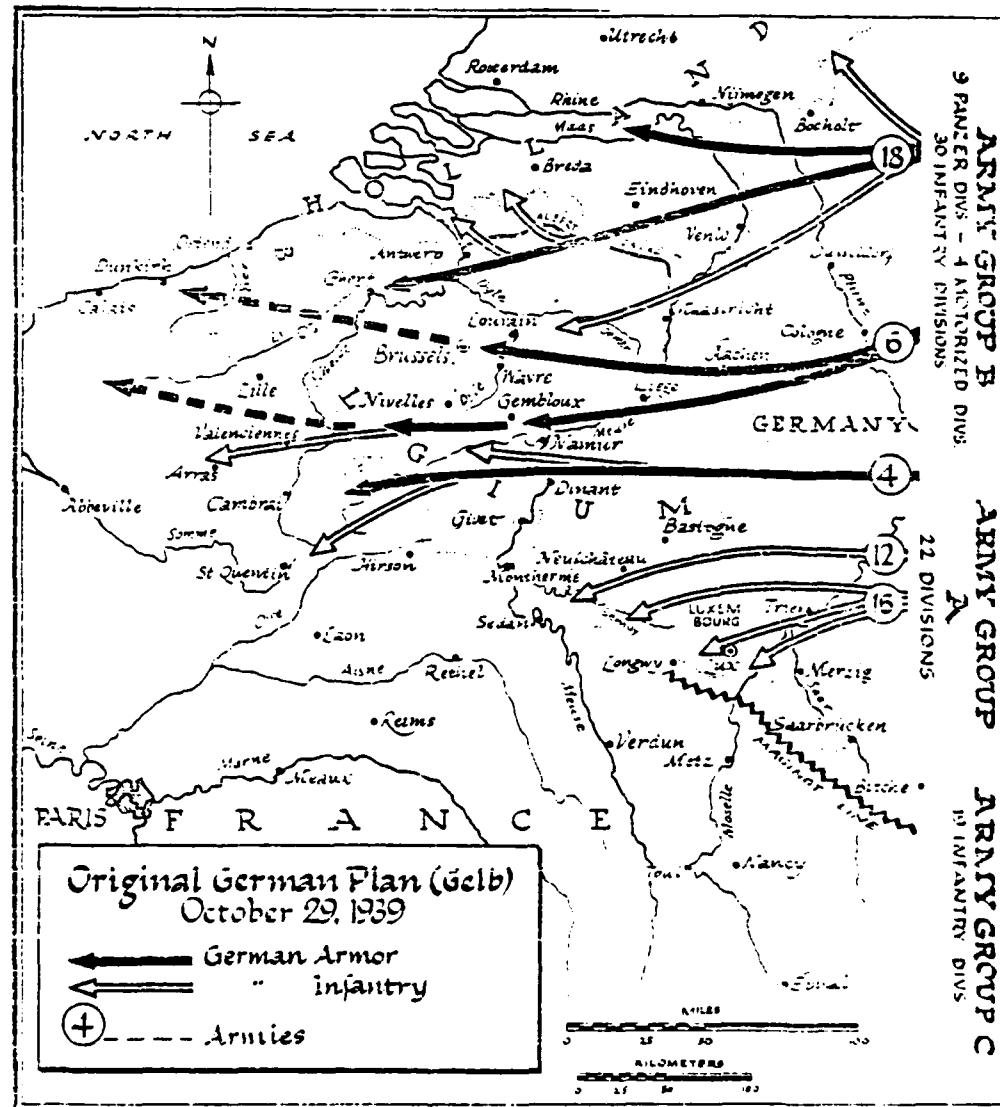
Western Front in WW I. They had integrated new weapons such as the tank and the airplane into a concept of warfighting which emphasized mass, concentration, and speed. They successfully did so with the intent of defeating an opponent who fought in the slow, methodical style of WW I.

In addition, they planned and executed their campaign in a way to place their strength against Allied weakness. Deception, synchronization of combat power at objective points, the indirect approach, the use of combinations to create synergistic effects, the orientation on destruction of their opponent's center of gravity, and paralyzing speed in execution were among the key notions used to focus their strength in a decisive way. Tactical successes were set up by initial employments; these successes were then exploited swiftly and linked together to achieve operational successes, which in the aggregate had a decisive strategic result. From the perspective of operational art and military theory, the German performance was superb.

No such comment can be made about the Allies, especially the French. Their vision of the future battlefield was fatally flawed. They failed to foresee that the calculus of war had changed fundamentally since WW I and that the Germans had figured out dynamic, creative applications of new technology which rendered old methods anachronistic. The French faith in defensive firepower convinced them that they could be strong everywhere; in fact, their lines were penetrated virtually at will wherever the Germans sought to focus combat power. The British historian Michael Howard once postulated that "the task

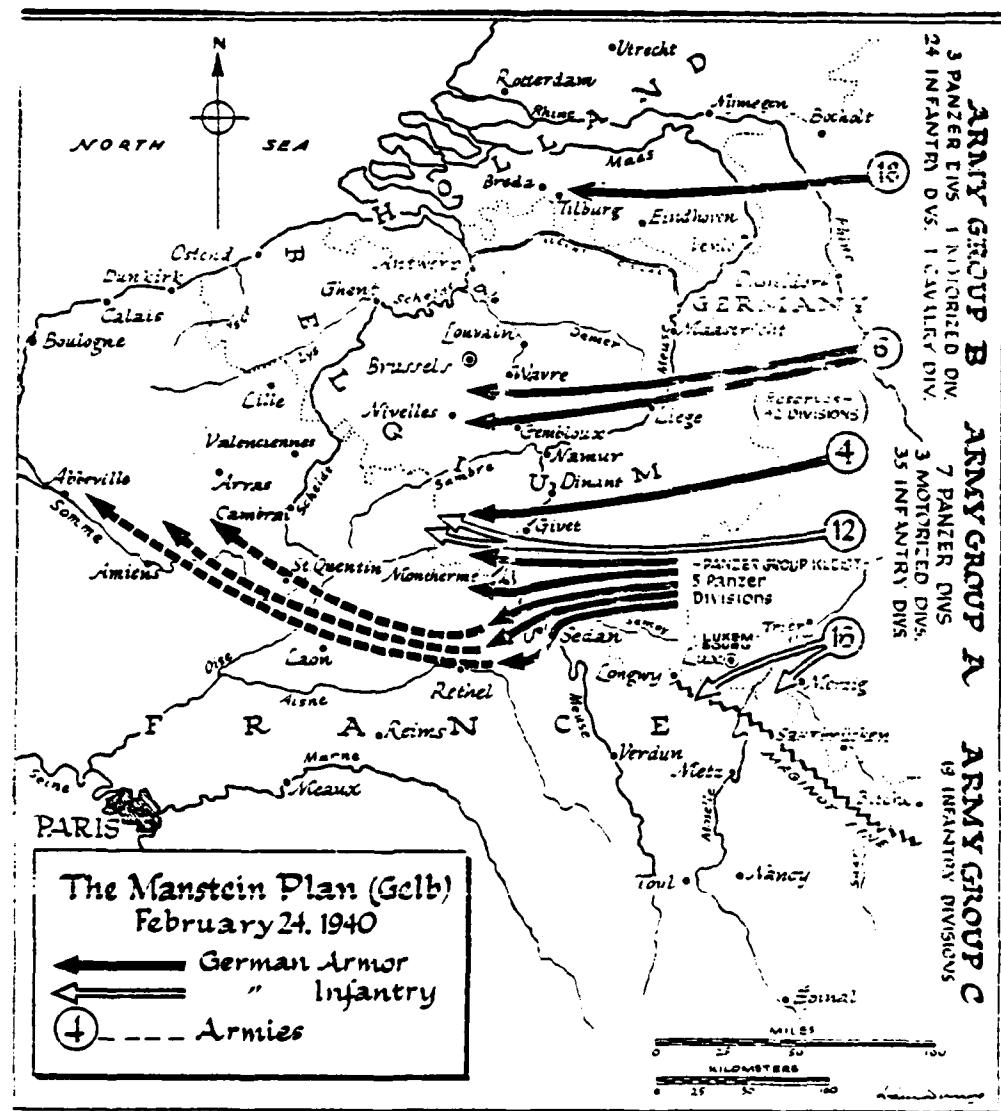
of military science in an age of peace is to prevent the doctrines from being too badly wrong."¹⁴ Given their adversary, the French tragedy was that their doctrine was largely out of touch with the times.

Once penetrated, the French were unable to adapt to the tempo of war imposed on them; their responses were "too little, too late." As a result, the French missed several excellent opportunities to counterattack in a timely fashion to wrest the initiative from their adversary. They demonstrated a distinct lack of appreciation for concentration of combat power at selected objective points, synchronization in space and time, and the synergistic employment of forces. The assumptions upon which both their doctrine and their campaign plan were based had become articles of faith; this made French military leaders insensitive to developments which affected the continuing viability of their doctrine and plans. The French plan visualized no immediate sequels or branches. It envisioned a single, successful grand clash of arms followed by stalemate. It arrogantly disregarded the effects of chance or friction in upsetting the best laid plans. As a result, reserves were depleted or dispersed so that they would be unable to react in force to the unexpected. If this campaign highlights German skill in applying operational art, it similarly demonstrates a bankruptcy of creativity, imagination, and understanding in its application by the French.



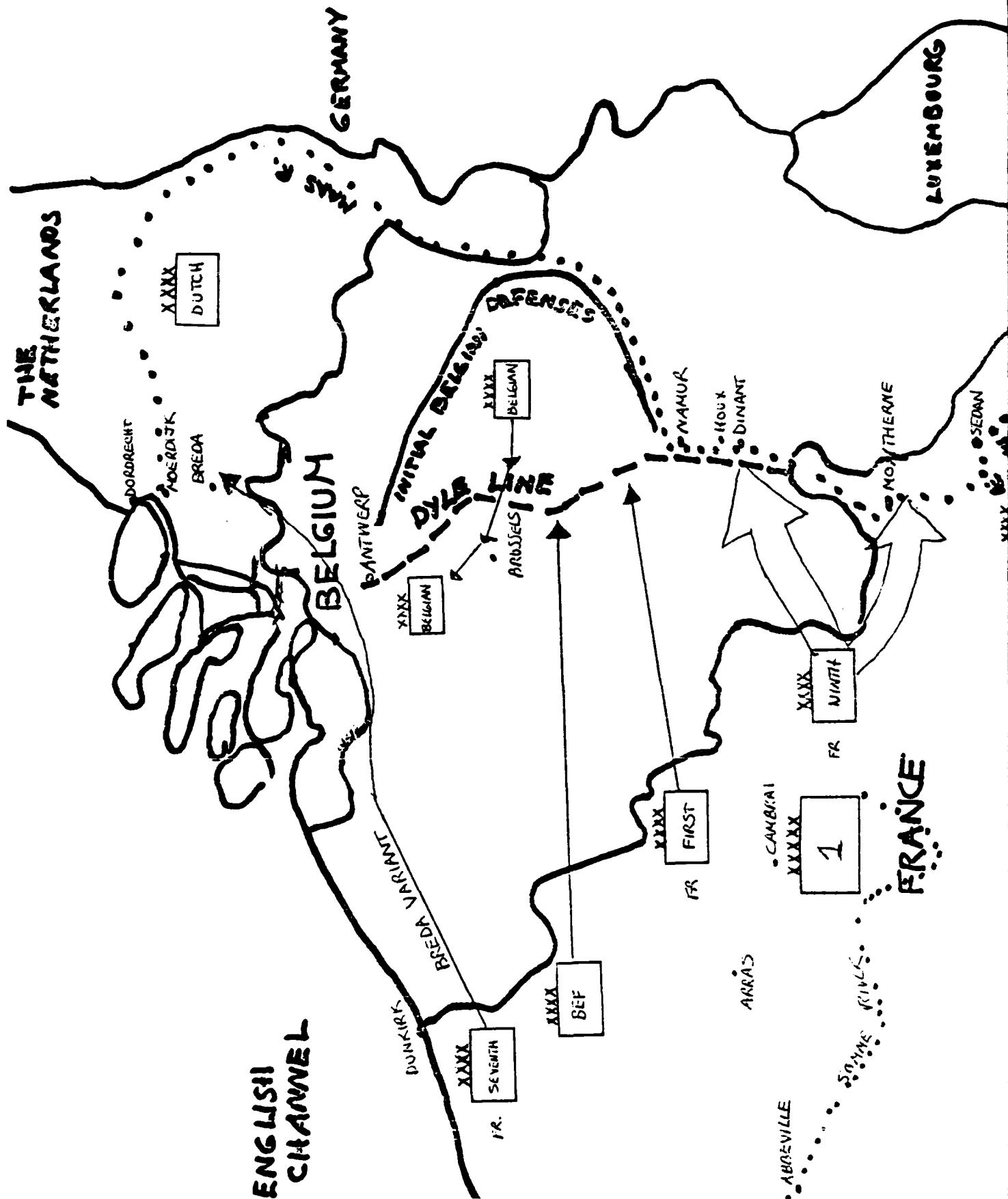
MAP A: THE ORIGINAL GERMAN PLAN YELLOW

SOURCE: William L. Shirer, The Collapse of the Third Republic (New York: Simon and Schuster, 1969), p. 591.



MAP B: THE FINAL VERSION OF PLAN YELLOW

SOURCE: William L. Shirer, The Collapse of the Third Republic (New York: Simon and Schuster, 1969), p. 592.



THE
NETHERLANDS

BRUGA

ANTWERP

BELGIUM

LINE

DUNKIRK

ALLIES

1

XXXX
A

XXXX
9

XXXX
4

XXXX
2

XXXX
12

XXXX
16

MAAS-NOORD LINE

XXXX
HOTEL

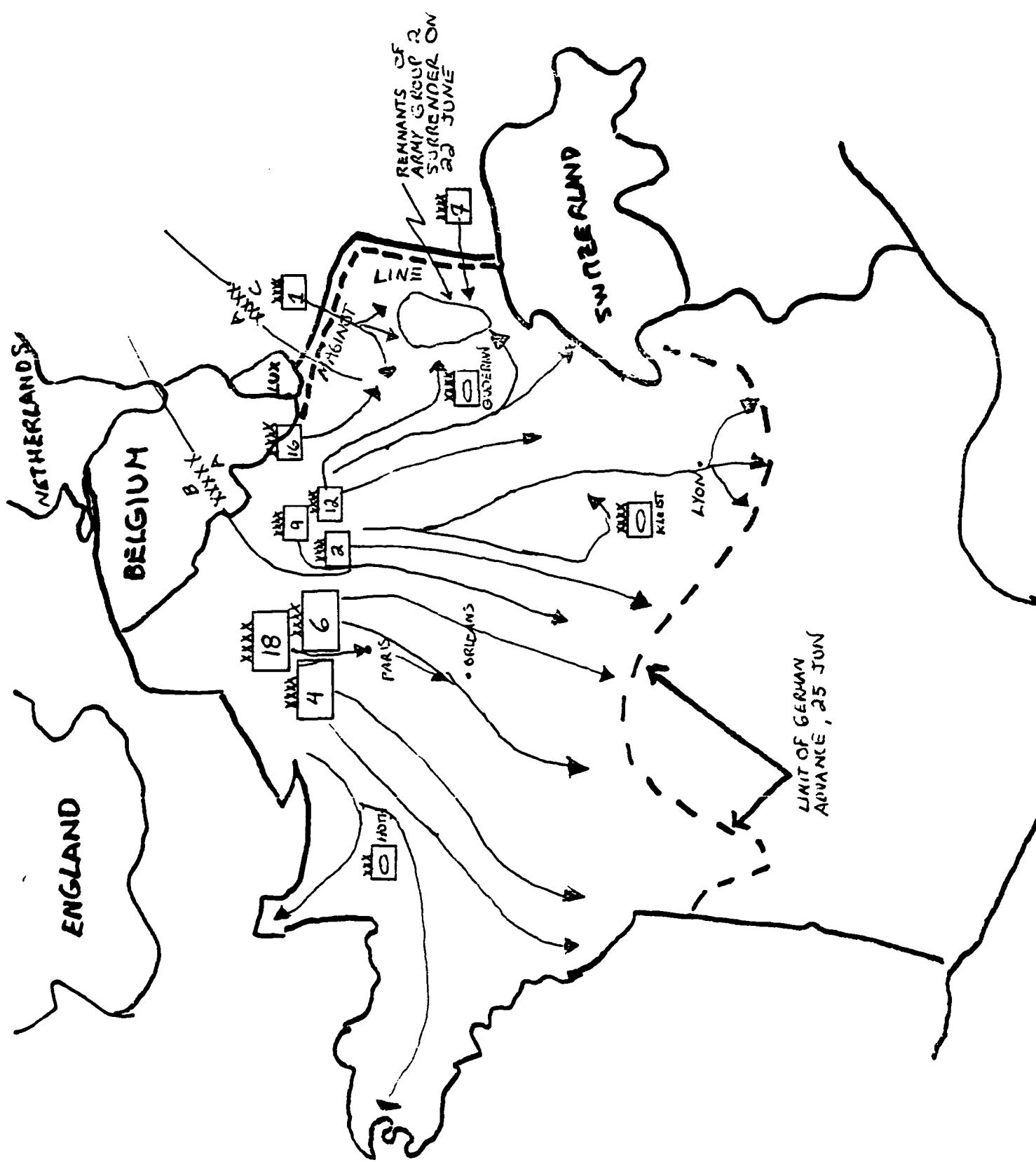
ARRAS

XXXX
PZ GLEIS
KLEIST

ADDEVILLE

SCHIE R.

MAP D: ADVANCE OF ARMY GROUP A (10 May-5 June 1940)



MAP E: THE CAMPAIGN IN FRANCE (5-25 June 1940)

ENDNOTES

1. Marc Bloc, Strange Defeat: A Statement of Evidence in 1940, translated by Gerhard Hopkins (New York: Norton, 1968), p. 36.

2. A panzer group was a temporary formation of armor-heavy forces for the accomplishment of specific missions. It was the equivalent of a field army in size but, unlike the normal field army, had no organic logistical force structure. It consisted of an operational maneuver headquarters and whatever other forces were assigned to accomplish assigned missions.

3. Carl von Clausewitz, On War, edited and translated by Michael Howard and Peter Paret (Princeton, N.J.: Princeton University Press, 1976), pp. 485-86 and 488-89; and James J. Schneider and Lawrence L. Izzo, "The Theory of the Center of Gravity" (Unpublished paper, School of Advanced Military Studies, US Army Command and General Staff College, Ft. Leavenworth, Kansas, circa 1986), pp. 1-8.

4. Baron de Jomini, The Art of War, translated by G.H. Mendell and W.P. Craighill (Philadelphia: J.B. Lippincott, 1862; reprint ed., Westport, Connecticut: Greenwood Press, no date), p. 67-68.

5. Included under the rubric of field armies are the panzer groups and the BEF.

6. The German word Schwerpunkt means "center of gravity" and was the word used by Clausewitz in the original German text of On War to express this concept. Every German plan or order designated a Schwerpunkt as standard procedure.

7. Jacques Benoist-Mechin, Sixty Days That Shook the West: The Fall of France, 1940, edited by Cyril Falls and translated by Peter Wiles (New York: G.P. Putnam's Sons, 1963), pp. 97-98.

8. Andre Beaufre, 1940: The Fall of France, translated by D. Flower (London: Cassell, 1967), p. 179; Jeffery A. Gunsburg, Divided and Conquered: The French High Command and the Defeat of the West, 1940 (Westport, Connecticut: Greenwood Press, 1979), pp. 188, 195.

9. Jomini, The Art of War, p. 63; Clausewitz, On War, pp. 194-97, 204; Schneider and Izzo, "The Theory of the Center of Gravity," pp. 8-12.

10. Robert Allan Doughty, The Seeds of Disaster: The Development of French Army Doctrine, 1919-1939 (Hamden, Connecticut: Archon Books, 1985), pp. 174-90.

11. Guy Chapman, Why France Collapsed (London: Cassell, 1968), p. 351; Len Deighton, Blitzkrieg: From the Rise of Hitler to the Fall of Dunkirk (London: Jonathan Cape, 1979; reprint ed., New York: Ballantine Books, 1982), p. 169.
12. John Williams, The Ides of May: The Defeat of France, May-June 1940 (London: Constable, 1968), pp. 166-67.
13. Clausewitz, On War, pp. 358-59, 383, 528.
14. Michael Howard, "Military Science in an Age of Peace," Journal of the Royal United Services Institute for Defence Studies 119 (March 1974): 7.

BIBLIOGRAPHY

Alexander, Don A. "Repercussions of the Breda Variant." French Historical Studies 8 (Spring 1974): 459-88.

Beaufre, Andre. 1940: The Fall of France. Translated by Desmond Flower. London: Cassell, 1967.

Benoist-Mechin, Jacques. Sixty Days That Shook the West: The Fall of France, 1940. Edited by Cyril Falls. Translated by Peter Wiles. New York: G.P. Putnam's Sons, 1963.

Bloch, Marc. Strange Defeat: A Statement of Evidence in 1940. Translated by Gerhard Hopkins. New York: Norton, 1968.

Blumentritt, Guenther, General der Infanterie. Instructive Strategic and Tactical Examples Taken From Two World Wars, Part III. Report prepared for the Historical Division, US Army, Europe; 1947. Document Number MS # B-306.

Bond, Brian. France and Belgium, 1939-40. Newark, N.J.: University of Delaware Press, 1979.

_____. "Battle of France." In Decisive Battles of the Twentieth Century: Land-Sea-Air, pp. 101-113. Edited by Noble Frankland and Christopher Dowling. New York: David McKay Company, 1976.

Chapman, Guy. Why France Collapsed. London: Cassell, 1968.

Clausewitz, Carl von. On War. Edited and translated by Michael Howard and Peter Paret. Princeton, N.J.: Princeton University Press, 1976.

Deichmann, Paul, General der Flieger. German Air Force Operations in Support of the Army. Edited by Littleton B. Atkinson. US Air Force Historical Studies, No. 163, Research Studies Institute. Maxwell Air Force Base, Alabama: Air University, June 1962.

Deighton, Len. Blitzkrieg: From the Rise of Hitler to the Fall of Dunkirk. London: Jonathan Cape, 1979; reprint ed., New York: Ballantine Books, 1982.

Doughty, Robert Allan. The Seeds of Disaster: The Development of French Army Doctrine, 1919-1939. Hamden, Connecticut: Archon Books, 1985.

_____. "The Enigma of French Armored Doctrine 1940." Armod 83 (September-October 1974): 39-44.

Ellis, L.F. The War in France and Flanders, 1939-40. London: Her Majesty's Stationery Office, 1953.

Englert, Bernd W. "Failure in Northern France, May 1940." Military Review 63 (November 1983): 2-11.

Garnett, David. War in the Air, September 1939-May 1941. Garden City, N.Y.: Doubleday, Doran, and Company, 1941.

Goutard, A. The Battle of France, 1940. Translated by A.R.P. Burgess. New York: Ives Washburn, 1959.

Greiner, Helmuth, Ministerialrat im OKW, ed. Greiner-Series, OKW War Diary (1939-43): Western and Northern Europe, 1940. Translated by A. Rosenwald. Manuscript prepared for the Historical Division, European Command, 1950. Document Number MS # C-065d.

Guderian, Heinz, Generaloberst. Panzer Leader. Translated by Constantine Fitzgibbon. London: Michael Joseph, 1952; reprint ed., New York: Ballantine Books, 1972.

Gunsburg, Jeffery A. Divided and Conquered: The French High Command and the Defeat of the West, 1940. Westport, Connecticut: Greenwood Press, 1979.

Halder, Franz, Generaloberst. Operational Basis for the First Phase of the French Campaign in 1940. Report prepared for the Historical Division; US Army, Europe; 1953. Document Number MS # P-151.

_____, ed. Der Westfeldzug. 2 vols. Report prepared for the Historical Division; US Army, Europe; 1959. Document Number MS # P-208. Vol. 1: Die Vorgeschichte, by General der Infanterie Kurt von Tippelskirch. Vol. 2: Darstellung der Operationen, by General der Infanterie Guenther Blumentritt.

Horne, Alistair. To Lose a Battle: France 1940. New York: Little, Brown, and Company, 1969; New York: Penguin Books, 1979.

Howard, Michael. "Military Science in an Age of Peace." Journal of the Royal United Services Institute for Defence Studies. 119 (March 1974): 3-11.

Jacobsen, Hans-Adolf. Dokumente zum Westfeldzug 1940. Goettingen: Musterschmidt Verlag, 1960.

_____. Fall Gelb. Der Kampf um den Deutschen Operationsplan zur Westoffensive 1940. Wiesbaden: Franz Steiner Verlag, 1957.

Jacobsen, Hans-Adolf, and Rohwer, Juergen, eds. Decisive Battles of World War II: The German View. Translated by Edward Fitzgerald. New York: G.P. Putnam's Sons, 1965.

Jomini, Baron de. The Art of War. Translated by G.H. Mendell and W.P. Craighill. Philadelphia: J.B. Lippincott, 1862; reprint ed., Westport, Connecticut: Greenwood Press, no date.

Lee, Asher. The German Air Force. New York and London: Harper and Brothers, 1946.

Leeb, Wilhelm Ritter von, Generalfeldmarschall. French Campaign (1940). Comments prepared for the Historical Division, European Command, 1946. Document Number MS # B-803.

Lewis, S.J. Forgotten Legions: German Army Infantry Policy, 1918-1941. New York: Praeger, 1985.

Macksey, Kenneth. Guderian: Creator of the Blitzkrieg. New York: Stein and Day, 1976.

Manstein, Eric von, Field-Marshal. Lost Victories. Edited and translated by A.G. Powell. Chicago: H. Regency, 1958; reprint ed., Novato, California: Presido Press, 1982.

Mellenthin, F.W., Generalmajor. Panzer Battles: A Study of the Employment of Armor in the Second World War. Edited by H. Betzler. Translated by L.C.F. Turner. Norman, Oklahoma: University of Oklahoma Press, 1956.

Murray, Williamson. Strategy For Defeat: The Luftwaffe, 1933-45. Maxwell Air Force Base, Alabama: Air University Press, 1983.

Nolfi, Albert A., ed. The War Against Hitler: Military Strategy in the West. New York: Hippocrene Books, 1982.

Rundstedt, Gerd von, Generalfeldmarschall. Notes on the "Campaign in the West". Edited by H. Heitman. Translated by the US Army. Commentary prepared for the Historical Division, European Command, 1950. Document Number MS # C-053.

Schirer, William L. The Collapse of the Third Republic: An Inquiry Into the Fall of France in 1940. New York: Simon and Schuster, 1969.

Schneider, James J. and Izzo, Lawrence L. "The Theory of the Center of Gravity." Unpublished paper, School of Advanced Military Studies, US Army Command and General Staff College, Fort Leavenworth, Kansas, circa 1986.

Spears, Sir Edward, Major-General. Assignment to Catastrophe. 2 vols. New York: A.A. Wyn, 1954-55.

Strawson, John. Hitler's Battles for Europe. New York: Charles Schreiber's Sons, 1971.

Taylor, Telford. The March of Conquest: The German Victories in Western Europe, 1940. New York: Simon and Schuster, 1958.

Wallach, Jehuda L. The Dogma of the Battle of Annihilation: The Theories of Clausewitz and Schlieffen and Their Impact on the German Conduct of Two World Wars. Westport, Connecticut: Greenwood Press, 1986.

Westphal, Siegfried. The German Army in the West. London: Cassell, 1951.

Williams, John. The Ides of May: The Defeat of France, May-June 1940. London: Constable, 1968.

_____. France: Summer 1940. Ballantine's Illustrated History of World War II, Campaign Book No. 6. New York: Ballantine Books, 1970.

Young, Robert J. In Command of France: French Foreign Policy and Military Planning, 1933-1940. Cambridge, Massachusetts: Harvard University Press, 1978.

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